

Traditional Timber Framing Today

The Timber Framers Guild of North America was formed in 1985 at its first annual national conference at Hancock Shaker Village in Pittsfield, Massachusetts. The Guild was created, as a not-for-profit organization, in response to the growing need for a network to allow craftsmen who specialized in timber frame building methods to exchange knowledge. A renewed interest in timber frame construction had created a demand for specialists; however, the educational resources available to those interested in pursuing that historic craft were extremely limited. The Guild set as its own mandate the development of those educational opportunities.

Initially, educational conferences were the platform used to educate both professional and amateur enthusiasts. Annual conferences were held, in both the US and Canada, which offered seminars, workshops, and panel discussions relating to design, materials, layout methods, joinery, raising, and the history of heavy timber framing. As the Guild evolved, so did the conference format which today includes three conferences each year. The seminar topics have grown to include business, forestry, health, safety, recycling, and regulatory issues. The conferences also feature extended sessions and workshops which allow for in depth study and hands-on experience in the more technical aspects of timber framing.

In addition to conferences, the Guild has developed a stand alone workshop program and created an annual rendezvous which allows for a

totally focused educational experience. Students who attend a workshop may learn the methods for grading timber for structural uses, or how to understand and practice joinery layout using the "square rule" system, or assist in the reconstruction of an historic structure. Three years ago a Guild workshop recreated a timber framed building, using the "French Scribe" layout system, at St. Marie of the Iroquois in Syracuse, NY. The barracks is part of the reconstruction of an early Jesuit missionary settlement. The workshop format enabled students to work side by side for two weeks with master timber framers from the US and Great Britain. The focus of the workshop was to teach the intricacies of a centuries-old system of layout still used today by European craftsmen.

More recently, the TFGNA has developed the concept of a rendezvous coupled with a work project. In 1994, Guild members met at Malabar Farms State Park in Ohio, to recreate a "hand raising" of the main dairy barn which had been lost to fire. The frame had been "cut up" ahead of time, by a group of professional framers, using historically accurate joinery and framing typologies. The raising not only offered an opportunity to work in a community environment, but provided for an event which was open to the public: 55,000 people took advantage of that educational opportunity. Most recently, the Guild joined forces with the Forest Service in the restoration of the Dolly Copp pavilion at the foot of Mount Washington in New Hampshire. The pavilion was built as a CCC project in the 1930s, using "scribe rule" layout to join wall and roof timbers that were worked "in the round." The restoration was effected by replacing timbers that were no longer structural with new logs from trees which had been planted for that very purpose as part of the CCC program. As many of the original logs as possible were retained.

The Guild has also developed an editorial staff to provide access to information about activities, facilities, and technical issues specific to the trade. Conference scheduling, workshop and rendezvous dates, and general timber frame news and information are published in a monthly newsletter called *Scantlings*. Reports on conference proceedings, editorials, book reviews, and technical and historical articles are published in a quarterly magazine called *Timber Framing*. In 1996, the *Timber Frame Joinery & Design Workbook* was

Main dairy barn at Malabar Farms State Park. "Hand raising" of timber frame bent with the help of Ohio Governor Voinovich.





Completed timber frame at main dairy barn, Malabar Farms State Park.

released. As both a collection of previously published technical articles and newly released research and design data, the workbook is the most popular publication of its kind. It provides easy access for architects, builders, restoration and preservation tradesmen, and aficionados of the historic craft to information specific to planning and design.

Future educational programs planned for the Guild include a series of repeating workshops which would travel around the country for development of skills at timber framing shops, schools, and other educational settings. These workshops would focus on specific framing techniques as well as design and preservation issues. In conjunction with this, the Guild recently received certification from the AIA which will allow architects to receive credit for attending Guild forums, seminars, and workshops. The Guild is also developing relationships with other organizations and institutions in the form of sponsorships and cooperative efforts. The Timber Framers Guild is one of the sponsors of the upcoming International Preservation Trades Workshop hosted by the National Park Service.

Several years after the Guild was formed, a faction of its membership voiced the need for a focus on issues specifically relating to historical timber framing. Many Guild members specialize in restoration and preservation aspects of the trade, which made access to educational formats specific to historical topics and the need for documentation of existing timber frame buildings critical. Subsequently, the Guild approved the formation of the Traditional Timberframe Research and Advisory Group. The creation of TTRAG allowed the use of the existing Guild infrastructure to augment the willingness of many of its members to share the knowledge and perspective which can

only come from hands-on involvement in preserving and recording early timber framed buildings.

TTRAG set its goals apart from those of its parent organization by creating a membership requirement based on active involvement. In order to become a member, an individual is required to submit surveys of existing historical framed structures and participate actively in the research of preservation trades through submission of articles for publication or presentation at a conference of a seminar specific to historical framing issues. Maintenance of membership is also based on activity. In this way, TTRAG initiated the first concentrated Guild effort to work toward the development of an archive of timber frame buildings.

TTRAG began developing its own educational format immediately after its creation. Following in the footsteps of its parent organization, it created a conference schedule to enable its members to share their experiences and needs. Again taking a tack toward active members, the initial conferences were developed with a requirement of those attending presenting a survey, report, or discussion relating to a historic project with which they were involved. This created an environment in which attendees had an interest in sharing their experiences with all the others in attendance. These conferences grew to include an open symposium each year to allow greater access to this information. Currently TTRAG hosts a steering committee meeting each year which requires every attendee to give a presentation, and an open conference which exclusively addresses historic issues relating to timber frame structures.

As with the Guild itself, TTRAG has realized the need for more in-depth presentations dealing with preservation issues. At its 1997 annual conference, held in Rosendale, NY, in addition to presentations dealing with the primal forest, mill structures, Dutch-American framing, and extinct bridge trusses, a three-hour workshop entitled "Old Ways of Measuring" dealt specifically with how early framers dealt with laying out joinery, on hand hewn timbers, through the use of patterns and very distinct systems of referencing. The fact that one system known as "square rule" would seem to be an early American development was of great interest to many in attendance.

One very popular activity at each open TTRAG conference is known as "tool time." This show-and-tell format activity creates an opportunity for conference attendees to share their knowledge of the tools they have learned to use in their own practices, as well as attempting to identify tools of unknown use and origin. Often, it is these what's-its that open lines of communication between seemingly unrelated fields of preservation

work. This cross platform networking has proven invaluable in many scenarios.

TTRAG is also active in editorial contributions to Guild publications. Much of the content of the Guild quarterly *Timber Framing* is articles on preservation and historical topics. This fact is also represented in the Guild's design workbook which accents the fact that most of today's timber frame technology is based on its historical application. Through the surveys and studies of its members, historians, preservation artisans, state and federal institutions, TTRAG is beginning to network the past, present, and future of timber frame building systems.

Although much knowledge has been lost that relates to the use of heavy timber construction and timber frame joinery systems, the formation of the TFGNA and TTRAG has opened the door to connecting those who are actively engaged in the work of preserving timber frame buildings and preserving the trade of building them itself, with those who would have an interest in seeing them pre-

served. As public awareness and the interests of private and public agencies grow, so will the demand for greater understanding of the preservation technologies on which the existence of our historic timber frame structures depend. It is the mandate of these organizations to develop the programs and networks that will allow access to all information that may benefit such a cause. By expanding the knowledge that is available and improving the access to that knowledge, the prospect of preserving our magnificent architectural heritage will be greatly improved. It is to this effort we should recommit our energies.

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Photos by the author.

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The Diversity of Application

The International Preservation Trades Workshop (IPTW) responds to the growing interest and demand for proper historic preservation skills training. Historic preservation has increasingly become more isolated as a trade, where preservation consultants and technicians are performing projects of growing significance and scope. The preservation of our nation's treasured heritage needs refined professionals, and our cities and towns require a more sensitive, cost effective approach in maintaining our built environment. The Institute for Preservation Training (IPT), a co-sponsor of IPTW, seeks to provide a new generation of historic preservation services, through an integration of vocational training, education, and contracting. IPT provides a program of training and heritage education, to people of a variety skill levels, who become active in all aspects of our projects. The success of the program relies on maintaining proper evaluation and placement of our participants, enabling a comprehensive, complete work exposure, as well as pro-

viding our customers a quality cost-effective work product. Expansion of the demand for higher historic preservation services will provide the means toward maintaining successful training and placement of qualified professionals in the field.

As the American built environment continues to be restored, the demand for cost-effective restoration methods will become more prevalent. Despite this growth of building re-use and preservation, the development of professional training has not yet fully responded. Projects are being completed with unqualified professionals, where a building's resources are mis-used and wasted, materials are being improperly applied and buildings are being grossly under-used. Yet the process may be as simple as a more disciplined approach—saving money, labor, materials, and most importantly, paying tribute to a building's historical design and use. The trends for increased preservation services are most apparent in the increasing requests for proposals requiring the contracting professionals to be versed in historic building restoration, although there is no real standard in which they are qualified. Parallel to the need for proper building preservation and qualified professionals, there is a growing necessity for the downsizing of federally-subsidized assistance job training programs. The growing demand for real job skills training for people with disabilities and barriers to employment has created an opportunity for a unique work force to participate in building preservation. The combined demand for greater professionalism in the field of